



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspito.gov

	T			
APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/047,788	01/14/2002	Martin Walter Dalton	4058-122	5602
23448	7590 11/26/2002			
INTELLECTUAL PROPERTY / TECHNOLOGY LAW			EXAMINER	
	PO BOX 14329 RESEARCH TRIANGLE PARK, NC 27709		BASTIANELLI, JOHN	
			ART UNIT	PAPER NUMBER
			3754	
			DATE MAILED: 11/26/2002	!

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(a)
	application ivo.	Applicant(s)
	10/047,788	DALTON, MARTIN WALTER
Office Action Summary	Examiner	Art Unit
	John Bastianelli	3754
The MAILING DATE of this communication appea Period for Reply	rs on the cover si	heet with the correspondence address
A SHORTENED STATUTORY PERIOD FOR REPLY IS THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply with 1 th NO period for reply is specified above, the maximum statutory period will a Failure to reply within the set or extended period for reply will, by statute, ca. Any reply received by the Office later than three months after the mailing day earned patent term adjustment. See 37 CFR 1.704(b). Status	a). In no event, however ithin the statutory minimu apply and will expire SIX ause the application to be	r, may a reply be timely filed um of thirty (30) days will be considered timely. i (6) MONTHS from the mailing date of this communication. scome ABANDONED (35 U.S.C. § 133).
1) Responsive to communication(s) filed on 14 Jan	nuary 2002 .	
2a) ☐ This action is FINAL. 2b) ☐ This	action is non-fina	ıl.
3) Since this application is in condition for allowand closed in accordance with the practice under Ex	ce except for form x <i>parte Quayle</i> , 1	nal matters, prosecution as to the merits is 935 C.D. 11, 453 O.G. 213.
Disposition of Claims		
4) \boxtimes Claim(s) <u>1-13</u> is/are pending in the application.		
4a) Of the above claim(s) is/are withdrawn	from considerat	ion.
5) Claim(s) is/are allowed.		
6)⊠ Claim(s) <u>1-8 and 13</u> is/are rejected.		
7) Claim(s) 9-12 is/are objected to.		
8) Claim(s) are subject to restriction and/or e	election requirem	ent.
Application Papers		
9) The specification is objected to by the Examiner.		
10) The drawing(s) filed on is/are: a) accepted	ed or b) objected	to by the Examiner.
Applicant may not request that any objection to the		
11) The proposed drawing correction filed oni	s: a)∐ approved	b) disapproved by the Examiner.
If approved, corrected drawings are required in reply	y to this Office actio	on.
12) The oath or declaration is objected to by the Exar	miner.	
Priority under 35 U.S.C. §§ 119 and 120		
13) Acknowledgment is made of a claim for foreign p	priority under 35	U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:		
1. Certified copies of the priority documents	have been receiv	ved.
2. Certified copies of the priority documents		
 3. Copies of the certified copies of the priorit application from the International Bure * See the attached detailed Office action for a list o 	eau (PCT Rule 17	7.2(a)).
14) Acknowledgment is made of a claim for domestic		
a) ☐ The translation of the foreign language prov 15)☐ Acknowledgment is made of a claim for domestic	visional applicatio	n has been received.
Attachment(s)	· -	
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.	5) 🔲	Interview Summary (PTO-413) Paper No(s) Notice of Informal Patent Application (PTO-152) Other:

Art Unit: 3754

DETAILED ACTION

Specification

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

- 2. The abstract of the disclosure is objected to because the abstract is too long (more than 150 words) and the term "comprising" is to be changed as it is legal phraseology. Correction is required. See MPEP § 608.01(b).
- 3. The disclosure is objected to because of the following informalities: On page 1, line 30, the word "siezed" should be --seized--. Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 5. Claims 1-4 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Sheets US 2,417,994.

Art Unit: 3754

Sheets discloses a remote shut-off valve (Fig. 2) comprising a diaphragm valve (Fig. 2) and a pilot valve 106, the diaphragm valve having an inlet 66, an outlet 67, a valve member 71 and 77 and a valve seat 70, the valve member 71 and 77 having a closed position engaging the valve seat and an open position when the valve does not engage the valve seat, a first fluid conduit 86 and 97 connecting the inlet of the diaphragm valve to the inlet of the pilot valve 106, a second fluid conduit 93 connecting the outlet of the pilot valve to the outlet of the diaphragm valve, the diaphragm valve having a control chamber 113, and a flow channel 111 connecting the control chamber to the diaphragm valve inlet. The body of the diaphragm valve is a removable cap member 83 (column 6, lines 9-15), which provides the control chamber 113, the flow channel 111 is located within the cap member 83. A part of the fluid conduits are formed within the cap member 83 and the flow channel 111 comprises a branch in the first fluid conduit within the cap member 83. The diaphragm valve includes a housing 65 and the periphery of the valve member 71 and 77 is clamped between the cap member 83 and the housing 65. The pilot valve is non-directional (Fig. 2).

Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claims 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sheets US 2,417,994 in view of Smith US 4,063,708.

Art Unit: 3754

Page 4

Sheets discloses a remote shut-off valve (Fig. 1) comprising a diaphragm valve (Fig. 1) and a pilot valve 55, the diaphragm valve having an inlet 10, an outlet 11, a valve member 15 and 19 and a valve seat 13, the valve member 15 and 19 having a closed position engaging the valve seat and an open position when the valve does not engage the valve seat, a first fluid conduit 33 and 54 connecting the inlet of the diaphragm valve to the inlet of the pilot valve 55, a second fluid conduit 56 and 63 connecting the outlet of the pilot valve to the outlet of the diaphragm valve, the diaphragm valve having a control chamber 31, and a flow channel 53 connecting the control chamber to the diaphragm valve inlet. Sheets discloses tubes 33, 53, 56, and 63 which are seen as secured by quick release connectors (Fig. 1, connected by a threaded connection which is seen as quick release). Sheets lacks disclosing if the tubes are flexible, have O-ring seals that engage a part of the flexible tube, and have releasable securing means. Smith discloses a quick disconnect device for flexible tubes with an o-ring 25 engaging the flexible tube 30 which is a releasable securing means. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the connections of Sheets with quick release for flexible tubes as disclosed by Smith in order to provide a connection that reduces time to connect and disconnect.

Allowable Subject Matter

8. Claims 9-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 3754

9. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record fails to disclose a securing housing within which both of the flexible tubes are retained and having locking means to lock the securing housing to the body of the diaphragm valve as claimed in claim 9 in combination with claims 1 and 5-8 and a valve housing which has curved channels for each of the flexible tubes as claimed in claim 12 in combination with claims 1 and 5.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Griswold, Reese, Scott, Berger, and Weise disclose pilot valves with diaphragms and a flow channel. Handke discloses an o-ring in a flexible tube connection. Florida and Losell disclose a quick release connection in a flexible tube.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Bastianelli whose telephone number is (703) 305-0058. The examiner can normally be reached on M-F (8:30-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry C. Yuen can be reached on (703) 308-1946. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7765 for regular communications and (703) 308-7765 for After Final communications.

Art Unit: 3754

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is (703) 308-0975.

JΒ

November 22, 2002